

**Minutes of the Carlisle Board of Health
April 7, 2015**

Minutes	DISCUSSION ITEMS
Bills	Draft revisions to Swine & Manure Management Regulations -
Administrative Reports	100 Long Ridge Road Piggery Application – public record request
Foss Farm – Irrigation Well	Lifetime Green Homes 40B Application – revised plans submitted
Benfield certificate of compliance	<ul style="list-style-type: none">• Meisner Brem letter dated 3/31/15• Meisner Brem letter dated 2/6/15• Revised Plan submitted 3/31/15 and pdf
Noise Level Measurement Project (Scott Zdankiewicz)	Town Advisory Group to ZBA 4/3/15
527 Bedford Road – geothermal wells (Troy Heindel)	570 West Street – Preliminary Subdivision Plan submitted (no review fee) <ul style="list-style-type: none">• Missing documentation (email from George Mansfield) 41 Lowell Street – <ul style="list-style-type: none">• AECOM Periodic Review Statement dated 3/12/15• Tony Mariano Email dated 4/6/15

The meeting was called to order by the Chairman at 7:00 pm at town hall. Present were Board members Bill Risso (Chairman), Lee Storrs, Catherine Galligan, and Todd Thorsen. Donna Margolies was absent. Also present Linda Fantasia, Health Agent, and (Carlisle Mosquito)

BILLS – Two telephone visits by Emerson Home Care. **It was moved (Galligan) and seconded (Storrs) to approve the Emerson Home Care invoice. Motion passed 5-0-0**

ADMINISTRATIVE REPORTS –

Animal Inspector Appointments – Larry Sorli, Deb Toher May 1, 2015 to April 30, 2016.

Grant Funding:

1. Public Health Mini-Grant (\$2500) – Medical Waste/Sharps Disposal. Due 4/21/15.

The Board had considered applying for this grant previously. Although the grant would pay for a kiosk, it would require regular disposal which would be an ongoing cost to the town. The Board was not interested.

2. Community Health Network Association (CHNA) Mini-Grant (\$6000) – funding for 12 projects. “Projects should be directed to evidence-based or promising, innovative practices to improve primary care and preventive health services for vulnerable populations.”

Thorsen suggested the topic of Hidden Depression and Anxiety which is a focus area for CHNA 15. This might include self-damaging and reckless behaviors tied to depression and anxiety that include cutting and eating disorders like anorexia and bulimia. The goal of the workshop would be to increase public awareness of these hidden mental health problems. The Town of Concord identified depression, anxiety and stress as areas of concern for its residents during a community health assessment. Galligan offered to write the grant application. It might be possible to include the U Mass. Population Health Clerkship in the program. The Board agreed to submit a letter of intent. The application is not due until 5/21/15.

3. PHEP Mini-Grant Funding – deadline 4/15/15. There is approximately \$14,000 available. Applications are due April 15, 2015 with supporting detailed documentation. The town's deliverables for Budget Period 3 must be in good standing. Grants will be approved based on community need at the Ex. Committee meeting scheduled for April 23rd. Mini grant requests must be utilized by May 7, 2015 or the funds will be returned for regional purchases.

The Board agreed to request either a second laptop or an upgraded iPad. Using the After Action Report of a recent Rabies Clinic as a model, the Board agreed that registration is frequently the cause of delays at a vaccination clinic. Having a second registration location would improve the throughput.

Mass Dept. Public Health Intern – Stephanie M. Moore, BU School of Public Health, has been matched for the project "Tick Borne Disease and Deer Management". Stephanie is interested in epidemiology training opportunities and has veterinary and agricultural experience. She would be working with the Lyme Disease Subcommittee.

Summer Farmer's Market – The Self-Certification and Market Managers forms prepared by Dept. of Public Health intern David Estabrook and Board member Galligan will be sent to the market manager. This year's market is advertising a café area. The Board will want to know more about the cafe and whether an additional permit is required. Fantasia will contact the manager.

Carlisle Extended Day (142 East Street) – A second notice of non-compliance for coliform in drinking water in the kitchen sink and teachers room sink (Jan/Feb) was sent to the Board. E.coli was not present. A Tier 2 Public Notification was posted 1/19/15 by the Certified Well Operator White Water Industries. The Board questioned if it could be a contaminated filter. Fantasia will check with White Water for an update.

Foss Farm Irrigation Well

Sylvia Willard, Conservation Administrator, appeared before the Board to request a permit to install irrigation well in the community garden. This will be the 10th and final irrigation well to be installed. The wells use hand pumps. They are labelled "Not for Drinking". The wells are shut down when the gardens close. Willard asked about a reduced fee. The Board agreed that since there is no flow test or water analysis required, they would check with the Well Inspector to set the fee; The Board charged \$100 for the last well. The Board had no problem with the installation and wants to encourage community farming. The Board is willing to cover the administrative assistant's costs out of the operating budget. Fantasia will issue the permit and notify the Well Inspector.

41 Lowell Street (Police Station) – The Board received a copy of the "Periodic Review Opinion" for the site which is classified as a Temporary Solution in accordance with the Mass. Contingency Plan. Groundwater at the site was impacted due to a leaking underground storage tank in the 1980's. The pump and treatment system was dismantled in the 1990's. DEP approved a Temporary Solution classification which requires an assessment every five years. The review was conducted by Bob Cataldo of AECOM. Since the concentrations of Benzene in groundwater remain above drinking standards a permanent solution is not achievable or practical at this time. AECOM recommends continuing with the five year periodic review. The report was filed with DEP. Tony Mariano of the Water Quality Subcommittee reviewed the report and offered to meet with the Board to discuss the findings. The Board will accept the offer.

CASPER Region 4A Training – Risso, Fantasia and Alan Lewis (Ham Radio Group) attended the workshop which stands for Community Assessment for Public Health Emergency Preparedness. The workshop explained how to do a rapid assessment of critical needs during an emergency. The technique can also be used to determine readiness in advance of a disaster. Each town attending received a CD with the presentation and forms.

BENFIELD CERTIFICATE OF COMPLIANCE REQUEST – present for the discussion was Toby Kramer of NOAH, facility owner.

Kramer explained that the Board had issued a second Temporary Certificate of Compliance (TCOC) on 4/29/14 for the septic system pending stabilization of the vegetation over the leaching area. The TCOC expired on 5/20/14 at which time it was discovered that the cover placed over the leaching field contained pieces of asphalt. These were

removed and the area was reseeded in the fall. As the project reached full occupancy residents began complaining about septic odors and water quality. Adjustments were made to the water filtration system and the FAST alternative Technology required a second start up. NOAH has been working with the property managers, vendors and the Board of Health to resolve these issues. A few minor repairs such as providing gasketed covers on manholes and replacing missing bolts will be done this week. Representatives from Waste Treatment Services and J & R Engineering will be on site Thursday to check the FAST system which has been experiencing problems establishing the pre-treatment bacteria. The system is not in failure but just not working as it should. Kramer said that overall the project has satisfied all of the conditions of the Special Permit. She requested a final Certificate of Compliance from the Board.

The Board asked whether the monitoring wells had been sampled. The Board did not have any reports. Kramer said the wells had not yet been tested but will be done this week. She would not expect any problems with the readings since the leaching system has had minimal use. The Board asked about the sodium levels in the water. Kramer said they had improved and were currently at 20 mg/L. She did not yet have a copy of the latest report. The Board remained concerned that residents should be notified of the sodium level in case anyone was on a sodium restricted diet. Kramer said the testing has been done in accordance with the schedule set by DEP which permitted the Public Water Supply. There was one instance of a Notice of Non-compliance due to a failure to do a minute particulate analysis. With the exception of the sodium the system has been in compliance with the monitoring schedule.

Risso referred Kramer to a list of follow-up septic system items prepared by design engineer Mark Beaudry. Not all of the items have been satisfied. Of particular interest was the suggestion to camera the floor drain in the pump house to make certain there is no cross connection between the water filtration system and the FAST system. This might be the source of the additional sodium. It might also be productive to recheck the amount of chemicals being added to the filtration system. Kramer said the weekly checks of the FAST system indicate that the bacteria is beginning to grow and the system appears to be headed in the right direction. She is optimistic that the odors will abate when normal functioning is achieved.

Kramer agreed to (1) post a notice about the sodium levels for tenants and (2) have the septic system emergency shut off padlocked to prevent unauthorized access.

It was moved (Galligan) and seconded (Storrs) to issue another Temporary Certificate of Compliance for Benfield Farms to expire June 30, 2105, or sooner if the septic system is properly functioning and all other outstanding issues have been addressed. Motion passed 4-0-0.

Kramer thanked the Board and stressed that there are no safety violations occurring with the water and septic systems. It is now a matter of fine tuning them.

NOISE LEVEL MEASUREMENT PROJECT – Scott Zdankiewicz of U. Mass Lowell met with the Board to discuss his capstone project which involves measuring and mapping background noise in Carlisle. He has been working with Galligan, who is a member of the newly organized town noise committee, on the project. Also present was Ginny Lamere, also a member of the noise committee.

Zdankiewicz's methodology included measuring ambient sound levels at various points throughout the town by taking two minutes readings along the side of the road. The readings were taken on April 1st between 9:30 am and 12:30 pm along Route 225 and other main roadways. The readings correlate with the amount of traffic in the area at the time. Zdankiewicz suggested taking measurements at other times of the year for a fuller picture since these readings were done in late winter when temperatures ranged from 32° to 38°.

As part of his project, Zdankiewicz also tested four smart phone applications to see if the average citizen could reliably use these applications to measure noise levels. Zdankiewicz determined that results are affected by the sensitivity of the cell phone microphone. The sensitivity range of the htc ONE that he used ranges from approximately 30-80 dBA whereas an I Phone may have a range up to 100 dBA. The ability to calibrate the readings is also important. Although smart phone applications can be useful for preliminary data, a sound *level* meter is really necessary for accuracy. Taking readings over a three hour period would provide more useful information. Zdankiewicz also noted that the size of the town affects background noise: the greater the population, the greater the ambient level.

If the town were to establish a regulation, Zdankiewicz recommends using DEP's 10dBA above ambient noise as a standard. In this case it would be important to characterize ambient noise by taking background noise measurements on the main roads and the off roads using a calibrated sound meter. One is available for towns to use from DEP but the town may want to have its own. The Board noted that it would be important to review these measurements on a regular basis as the town grows. Lamere suggested using a tax volunteer worker to take measurements. The Board liked this idea. The town could also consider criteria for acceptable noise excursions and for what period of time. This might include lawn mowers, leaf blowers, hoe rams and other construction activities. The Board thanked Zdankiewicz for his report.

527 BEDFORD ROAD – Geothermal Well Installation Present for the discussion was Troy Heindel, owner.

The geothermal heating system will have two 430' deep closed loop bore holes. DEP issued an Underground Injection Control Registration on 3/26/15. Skillings & Sons submitted an application to drill the wells but there was no information provided by the heating company. The Board explained to Heindel that the work must comply with DEP *Guidelines for Ground Source Heat Pumps* approved December 2013. The Board noted a number of missing items on the plan such as the depth of the lines and location of abutting wells. Galligan explained that it is important to have an accurate plan locating all components and labelling the system for operation and maintenance. It is also important for future owners to be familiar with the system. She did not feel the material submitted was sufficient for the Board's consideration. Other Board members agreed. Heindel attempted to show property features and component locations using the septic plan but the Board agreed that the information needs to be on one plan. Heindel agreed to provide the missing documentation and asked if the Board would grant a conditional approval. He would like to get started as soon as possible and does not want to wait until the Board's next meeting on 4/28/15.

Board members were split on whether to grant a conditional approval. It was suggested that Fantasia could review the missing information with Risso as a second reviewer. Fantasia noted that other geothermal applications included a narrative from the heating company who often attended the meetings. Risso was not as concerned about granting a conditional approval since it is a closed loop system that is self-contained with no connection to groundwater. Galligan was not in favor of a conditional approval and felt the contractor had not sufficiently prepared the application. Thorsen said he understood Galligan's concerns about the lack of information. Carlisle has no town water available and everything that goes into the ground is of importance. Storrs said he was less concerned about the construction of the wells but the Board should have the same materials provided by other GSHP application and proof that the work will comply with the state guidelines. Thorsen said he would not object to granting a conditional approval as long as all of the required information is provided and satisfactory.

It was moved (Storrs) and seconded (Thorsen) to issue a conditional approval for the installation of two closed-loop geothermal wells for a Ground Source Heat Pump system at 527 Bedford Road contingent upon compliance with the MA DEP Guidelines for Ground Source Heat Pumps, approved December 2013 and approval of the Health Agent and Chairman that all had been provided. Vote: Yes - 3, No - 1 (Galligan) Abstain - 0. Motion passed.

DISCUSSION ITEMS

100 Long Ridge Road – Swine Permit Application – The Board notified applicant, Jeff Brem, that it would not require a public hearing for a site assignment for the keeping of swine on the above property as originally proposed. Brem had requested copies of all Swine Permits issued by the Board for the last twenty-five years. Since the Board was unaware of an existing 1947 Regulation requiring a Board of Health Permit to keep swine no permits were issued. The Board will advise Brem that no permits were issued during that time period.

SWINE AND MANURE MANAGEMENT REGULATIONS

The Board reviewed a revised Swine Regulation intended to replace the 1947 version. Following discussions with local farmers and the Agricultural Commission during the last Board of Health meeting the Board decided to include swine under its existing Barn Licensing procedure. Licensing includes an annual inspection of all animals as required by the state. There will be no additional fee.

The Board was impressed with the number of local farmers who raise one or two pigs typically spanning the period from April to October. There have never been any complaints. The Board did not want to impose overly restrictive conditions on this tradition. Requiring a public hearing for a site assignment would be excessive given the limited number of farms with pigs. The Board will reserve this right in the new regulation for situations that create a nuisance and may be injurious to the public health. Under the new regulation, farmers who keep swine will need to identify the number and when they are on the property. They will be required to provide a manure management plan. This will allow the Board the opportunity to address any public health risks or nuisances. The Board agreed that once the new regulations are adopted, current *barn* licensees will have to be notified.

By incorporating the keeping of swine within the existing barn licensing procedure, the Board does not need to define “piggery”. This is a zoning issue that the town needs to address. The Board of Health is only interested in health and welfare of residents and animals not land use under zoning.

The Board discussed how the timing of the license would work. Applications are sent out in August. The license runs from September 1st through August 31st. This was done in order to have all animals in town listed by October when the Animal Inspectors visit. The timing may not work for swine since piglets arrive in April and go to market in October. The Board may consider a separate inspection for swine. The Board made a few edits to the proposed regulation including increasing the daily fine from \$20 to \$100. The draft will be forwarded to the Agricultural Committee for comments.

Dave Willard, resident on Long Ridge Road, asked how residents will learn about the new regulation. The Board explained that health regulations do not require a town meeting vote only a Board vote in a public session. A notice will be placed in the Mosquito and the draft will be available in the office and on the town website.

The Board then discussed revisions to the Manure Management Regulations. A plan must be submitted with each new barn application and especially if swine will be present. The Board agreed to change some language on presumptions to make them more direct. The two major changes proposed involve transportation of manure in covered containers to avoid spillage on roadways and increasing the daily fine from \$5 to \$100. The draft will be sent to the Agricultural Committee and posted on the website.

Risso noted that the committee that prepared the Manure Regulations also created a Best Practices and Conflict Resolution Guide that was very informative. The Board agreed to distribute the information with each Barn License issued. This would be a good project for the summer MDPH intern.

Lifetime Green Homes (LGH) 40 B Application

A revised plan was submitted on 3/31/15. According to the applicant, this is the final plan for the Comprehensive Permit. A detailed septic plan will be submitted to the Board of Health at a later date.

The Board continues to have concerns, as does the Town Advisory Group, on the density of the project, its failure to include a public water supply, and the models used to determine nitrogen loading requirements. The Zoning Board is being asked to waive local regulations such as a 150’ distance between a leaching field and a well and a local design requirement of 165 gpd for condominiums. The Board does not believe the applicant has established a basis for granting these waivers. Galligan said she is very concerned about the density of the project and that the state has not been very helpful. The local regulations are there for a good reason, and if the state chooses to allow LGH to override them, the state DEP should be responsible for future failures. Storrs said that the Board should tell the Zoning Board not to grant the waivers and why. DEP has been reluctant to issue a written determination on the status of the Public Water Supply resulting in additional expense to both the applicant and the town in reviewing plans that may not be buildable.

Board members agreed that the nitrogen loading model used by the applicant had a number of flaws. It is not the model used by DEP. Based on the applicant’s projections there is no need for additional credit land. The Title 5 design flows using an alternative technology system would require 9.83 acres for nitrogen loading. The acreage available is 9.84. This is a too narrow margin for comfort. Risso approved up to three hours of Rob Frado’s time to

review the data. The Board is hopeful that the Zoning Board will agree to fund a Title 5 expert with the peer review funds. Again Galligan emphasized her concern about the density. There is no safety margin environmentally. Every infrastructure is being maximized in the smallest area possible. The land available is being overused by multiple, sometimes conflicting, systems such as waste water and drinking water. This *type* of planning can lead to catastrophic failures. Although the Board has raised warning flags, the state may simultaneously override the town's recommendations and yet put the burden of resolving downstream failures on the town.

570 West Street Preliminary Subdivision – table to the next meeting due to missing documentation.

Meeting Schedule: 5/12/15, 5/26/15, 6/9/15, 6/23/15

95 Hanover Road - Dr. Nouvellon, owner, visited town hall on Monday requesting copies of Board of Health files. She was directed to the Town Clerk to submit the request. She was provided the requested copies which were documented by the Health Agent and Town Clerk. All fees were paid prior to receiving the copies. Dr. Nouvellon was reminded that the Board expected an update on her construction schedule by May 1st.

There was no further business. Meeting voted to adjourn at 10:00 p.m.

Respectfully submitted,

Linda M. Fantasia
Recorder